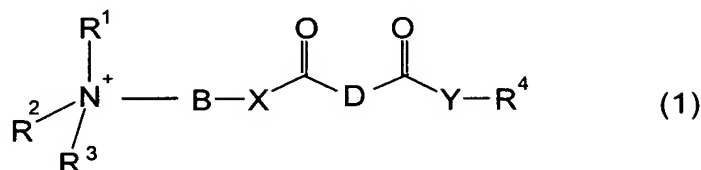


What is claimed is:

1. The use of compounds of the formula (1)



where

$\text{R}^1$ ,  $\text{R}^2$  are each independently  $\text{C}_1$ - to  $\text{C}_{22}$ -alkyl,  $\text{C}_2$ - to  $\text{C}_{22}$ -alkenyl,  $\text{C}_6$ - to  $\text{C}_{30}$ -aryl or  $\text{C}_7$ - to  $\text{C}_{30}$ -alkylaryl,

$\text{R}^3$  is  $\text{C}_1$ - to  $\text{C}_{22}$ -alkyl,  $\text{C}_2$ - to  $\text{C}_{22}$ -alkenyl,  $\text{C}_6$ - to  $\text{C}_{30}$ -aryl or  $\text{C}_7$ - to  $\text{C}_{30}$ -alkylaryl,  $-\text{CHR}^5-\text{COO}^-$  or  $-\text{O}^-$ ,

$\text{R}^4$  is M, hydrogen or an organic radical which optionally contains heteroatoms and has from 1 to 100 carbon atoms,

B is an optionally substituted  $\text{C}_1$ - to  $\text{C}_{30}$ -alkylene group,

D is an organic radical which optionally contains heteroatoms and has from 1 to 600 carbon atoms,

X, Y are each independently O or  $\text{NR}^6$ ,

$\text{R}^5$ ,  $\text{R}^6$  are each independently hydrogen,  $\text{C}_1$ - to  $\text{C}_{22}$ -alkyl,  $\text{C}_2$ - to  $\text{C}_{22}$ -alkenyl,  $\text{C}_6$ - to  $\text{C}_{30}$ -aryl or  $\text{C}_7$ - to  $\text{C}_{30}$ -alkylaryl, and

M is a cation

as gas hydrate inhibitors.

2. The use as claimed in claim 1, wherein B contains hydroxyl groups.

3. The use as claimed in claim 1 and/or 2, wherein B is a  $\text{C}_2$ - to  $\text{C}_4$ -alkylene group.

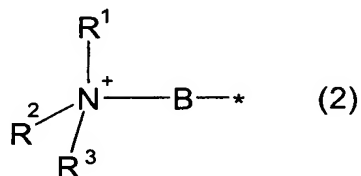
4. The use as claimed in one or more of claims 1 to 3, wherein  $\text{R}^1$  and  $\text{R}^2$

are each independently an alkyl or alkenyl group of from 2 to 14 carbon atoms.

5. The use as claimed in one or more of claims 1 to 4, wherein  $R^3$  is an alkyl or alkenyl group having from 1 to 12 carbon atoms.

6. The use as claimed in one or more of claims 1 to 5, wherein  $R^5$  and  $R^6$  are hydrogen.

7. The use as claimed in one or more of claims 1 to 6, wherein  $R^4$  is a radical of the formula (2)

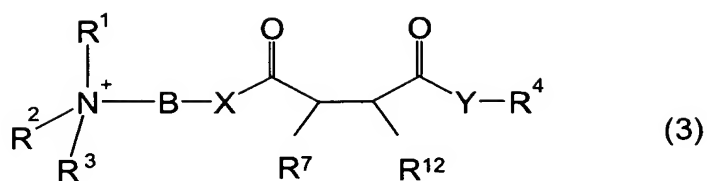


where  $R^1$ ,  $R^2$ ,  $R^3$  and B are each as defined in claim 1.

8. The use as claimed in one or more of claims 1 to 7, wherein D is a  $C_2$ - to  $C_{50}$ -alkylene or  $C_2$ - to  $C_{50}$ -alkenylene group.

9. The use as claimed in one or more of claims 1 to 7, wherein D is derived from substituted succinic acid derivatives having from 10 to 100 carbon atoms.

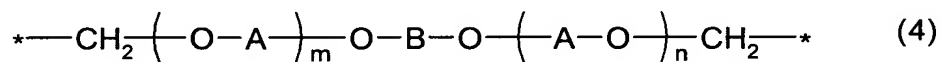
10. The use as claimed in one or more of claims 1 to 7, wherein D is a radical of the formula (3)



where

$\text{R}^7$  and  $\text{R}^{12}$  are each either hydrogen or a  $\text{C}_2$ - to  $\text{C}_{100}$ -alkyl or  $\text{C}_2$ - to  $\text{C}_{100}$ -alkenyl radical which is obtainable as an oligomer of  $\text{C}_2$ - to  $\text{C}_8$ -alkenes and may be straight-chain or branched, with the proviso that exactly one of the  $\text{R}^7$  and  $\text{R}^{12}$  radicals is hydrogen, and  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ , X, Y and B are each as defined in claim 1.

11. The use as claimed in one of more of claims 1 to 7, wherein D is a radical of the formula (4)



where A is a  $\text{C}_2$ - to  $\text{C}_4$ -alkylene group which may be straight-chain or branched, m and n are each independently a number in the range from 0 to 30 and B is as defined in claim 1.